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The real party in interest is The Steel Network, Inc.

(II.) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

(III.) STATUS OF CLAIMS

Claims 1, 6-8, 11, 21-24 and 34-38 are pending and are appealed herein.

Claims 2, 3, 4, 5, 9, 10, 12-20 and 25-33 have been canceled.

(IV.) STATUS OF AMENDMENTS

All amendments have been entered.

(V.) SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 is directed to a stud spacer **10** that extends between two studs **24** in a wall where each of the studs includes an opening **24C**. See Fig. 1A; page 2, paragraph 2, lines 2-3; page 6, paragraph 3, line 10. The stud spacer includes a main member adapted to extend between two studs. The main member includes first and second end portions. A projection **40** extends from one of the end portions. See Fig. 1A and page 4, paragraph 5, lines 4-6 and page 5, lines 1-3. An opening **42** is formed in the other end portion. See Fig. 1A and page 6, paragraph 1, lines 1-2. The main member includes a pair of side flanges **36** and a pair of end flanges **34**. See Fig 1A and page 5, paragraph 3, 1st sentence. End flanges **34** are adapted to be connected to the two studs that stud spacer **10** extends between. See Fig. 1 and page 5, 2nd full paragraph, 1st sentence. Stud spacer **10** is adapted to be connected to another stud spacer by extending projection **40** of the one stud spacer through opening **42** within one stud and

into the opening of another stud spacer. See Fig. 6 and page 6, paragraph beginning with "Having..." and concluding on page 7, next to last sentence in the paragraph.

Claim 21 calls for a stud spacer **10** that extends between two studs **24**. See Fig. 1 and page 6, paragraph 2, lines 9-10. The stud spacer **10** includes a main member adapted to extend between the two studs. The main member includes first and second end portions. A projection **200** extends from one end portion. See Fig. 7A-7H and page 7, paragraph 4, lines 3-5. There is provided a projection receiver formed on the other end portion. See page 7 paragraph 4, line 5; and page 8, lines 3-7. The projection **200** or projection receiver includes one or more locking members such that when a projection of one stud is projected into the projection receiver of another stud, a locked condition is realized. See Fig. 7H, page 10, lines 6-

Claim 34 calls for a stud spacer **10** that extends between two studs **24**, and which is connected to one or more similar stud spacers. See Fig. 1 and page 6, paragraph 2, lines 9-10. The stud spacer includes a main member. The main member includes opposed end portions. A projection **100** extends from one end portion. Page 10, paragraph 1, line 6. A receiver **102** is disposed on one end portion of the stud spacer and adapted to receive a projection **100** of another stud spacer. See page 10, paragraph 1, lines 7-9. When the two stud spacers are connected together, the projection **100** of one stud spacer will engage and lock with the receiver **102** of another stud spacer. See page 10, paragraph 1, lines 7-9.

(VI.) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 21-24 and 34-38 are anticipated under 35 U.S.C. §102(b) by Vukmanic, U.S. Patent No. 4,677,802.

In construing a disputed claim term, must the Examiner disclose to the Applicant the explicit claim construction given by the Examiner to the disputed claim term?

Whether claims 1, 6, 8 and 11 are obvious under 35 U.S.C. §103(a) as being unpatentable over Soucy, U.S. Patent No. 3,778,952, in view of Pellock, U.S. Patent No. 5,884,448.

Whether claims 7 is obvious under 35 U.S.C. §103(a) as being unpatentable over Soucy, in view of Pellock, and in further view of Tollenaar, U.S. Patent No. 6,705,056.

(VII.) ARGUMENT

A. Claims 21-24 and 34-48 Are Not Anticipated by Vukmanic.

Claims 21 and 34 are as follows:

21. A stud spacer for extending between two studs comprising:
 - a main member adapted to extend between the two studs;
 - the main member including first and second end portions;
 - a projection extending from one end portion;
 - a projection receiver formed on the other end portion;
 - and
 - wherein either the projection or projection receiver includes one or more locking members such that when a projection of one stud spacer is projected into the projection receiver of another stud spacer a locked condition is realized.

34. A stud spacer for extending between two studs and connected to one or more similar stud spacers, comprising:
 - a. a main member;
 - b. the main member having opposed end portions;
 - c. a projection extending from one end portion;
 - d. a receiver disposed on the other end portion and adapted to receive a projection of another stud spacer; and
 - e. wherein when two stud spacers are connected together the projection of one stud spacer will engage and lock with the receiver of another stud spacer.
1. **In construing a disputed claim term, must the Examiner, when requested, disclose the claim construction to the Applicant, or can the Examiner refuse to disclose the claim construction and maintain that whatever the construction the prior art falls within the scope of the construction?**

In *ex parte* prosecution, this may be a novel question of law. Applicants have been unable to find any authority addressing this issue.

Certainly, claim construction is a vital and essential part of any patentability analysis in *ex parte* prosecution. Examiners are required to construe disputed claim terms. Only after the claims are construed, can the Examiner apply prior art. The MPEP, precedent of this Board, as well as Federal Circuit authority, holds that disputed claim terms in *ex parte* prosecution must be construed.

Section 2111.01 of the MPEP sets forth the basic rules of claim construction in *ex parte* prosecution. The words of the claim must be given their plain and customary meaning unless the plain meaning is inconsistent with the specification. See *In re Zeltz*, 893 F.2d, 319, 321, 13 U.S.P.Q.2d 1320, 1322 (Fed. Cir. 1989). The ordinary and customary meaning of a term may be evidenced by a variety of sources including the specification, the prosecution history, the words of the claims themselves, and extrinsic

evidence concerning the meaning of technical terms and the state of the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314, 75 U.S.P.Q.2d 1321, 1327 (Fed. Cir. 2005) (*en banc*).

The issue presented here is, what must the Examiner do to appropriately comply with the requirement to construe a disputed claim term? In this case, the Examiner was repeatedly requested to construe the claim terms "stud" and "stud spacer". On at least three different occasions the Examiner was requested to disclose his construction of these terms. See Applicant's Office Action responses of June 30, 2008, October 20, 2006, and July 14, 2006. The Examiner refused each request to disclose his claim construction. Thus, the issue here is, if requested by the Applicant, must the Examiner explicitly set forth his or her construction based on Section 2111.01 MPEP and the basic law of claim construction; or, can the Examiner refuse to disclose the construction and simply maintain that a part or feature of the applied prior art meets the disputed claim term? It is difficult to see how the claims can be fairly and thoroughly construed without Applicants' knowing the Examiner's construction of the disputed claim term.

Many times, Examiners, as a matter of course, disclose their claim construction. Applicants do not contend that the practice complained of here is routine.

When the Examiner refuses to disclose the claim construction, the Applicant is left with little knowledge of the construction except, again, that whatever construction was imparted to the claim term, it is broad enough to encompass a part or feature of the applied prior art. In these cases, the Applicants do not know if the Examiner gave the disputed claim term its plain and ordinary meaning, if the construction is consistent with the specification, or if the construction is consistent with how a person of ordinary skill in

the art would construe the term. In other words, the Applicant has no way of knowing if Section 2111.01 of the MPEP has been complied with, or if the construction comports with the basic canons of claim construction. Most importantly, without knowing the Examiner's construction, the Applicants have no way of effectively contesting or traversing the claim construction. In the end it is difficult, if not impossible, for the Applicants to challenge the claim construction.

An Applicant should not be left to speculate as to the Examiner's construction. When the Examiner refuses to divulge the construction, an Applicant cannot look at the applied prior art and determine with any degree of certainty the claim construction that was applied. While the Applicant can guess or speculate, there may be an infinite number of materially different constructions that would encompass a part or feature of the prior art being applied. Again, there is no way for the Applicant to know if the Examiner correctly applied the plain and customary meaning for the term, construed the term consistent with the specification, or construed the term consistent with how a person of ordinary skill in the art would have construed the same.

Logic is of little help traversing a claim construction issue where the Examiner refuses to disclose the claim construction. Here, the Applicant is left to argue that whatever the construction, the construction is unreasonably broad. Again, Applicant cannot attack the basis for the construction because the construction is unknown.

Fundamentally, claim construction cannot be carried out without disclosing the construction. If the Examiner's construction is withheld, can that really constitute claim construction? Notwithstanding, the advantages of disclosing the claim construction far outweigh the disadvantages. Certainly, by disclosing the claim construction to the

Applicant, there will be a more accurate claim construction. This will not change the basic law with respect to *ex parte* claim construction. Still, the Examiner can give the disputed claim term the broadest reasonable construction consistent with the specification. The point here is that the Examiner should be required to disclose the broadest reasonable construction to the Applicant. By knowing how the Examiner construes a claim term, the Applicant has an opportunity to amend the claim and better define the invention over the prior art. This should result in less appeals. In addition, the public interest is served by an open claim construction process because in the end the claim as a whole is clearer and perhaps more definite. This serves the public notice function of the claim.

The requirement for an explicit construction is not burdensome or unreasonable. Here, for example, the claim terms in dispute are “stud” and “stud spacer”. Certainly, as required, the Examiner construed these terms. Requiring the Examiner to disclose a construction that already has been made is not burdensome or unreasonable. This is especially true considering the fundamental role that claim construction plays in a patentability analysis.

Applicants understand that the Board, from time-to-time, engages in claim construction and sometimes expressly states the construction. However, an Applicant should not have to appeal an Examiner’s decision to obtain a claim construction. That is a very expensive and time-consuming approach to such a fundamental principle of patent law.

There is danger in condoning a practice where the Examiner is not required to disclose to the Applicant the claim construction. The danger is that the claim

construction step may be skipped or casually approached by looking at the disputed claim term and simply concluding, without a construction, that a part or feature of the applied prior art meets that term. In such cases the canons of claim construction are not applied. If this happens, there is a chance that in a significant number of cases that the claim construction is wrong.

The Board is respectfully urged to separately address this issue and to specifically hold that when a claim construction term is clearly in dispute and the Applicant requests the Examiner to disclose his or her claim construction, that the Examiner must do so.

2. Properly construed, the claims are not anticipated by Vukmanic.

As noted above, the first step in a Section 102 analysis is claim construction. All claim terms that are in dispute must be construed.

Based on the specification including the drawings and the customary and ordinary meaning of the term “stud spacer,” the term “stud spacer” as used in the present application means a structural member interposed between studs in a wall for holding the studs a given distance from each other. Again, that construction is consistent with the customary and ordinary meaning of the term “stud spacer,” consistent with Applicants’ specification, and consistent with how a person of ordinary skill in the art would construe the term.

Regarding the ordinary meaning of the term “stud”, the McGraw-Hill Dictionary of Scientific and Technical Terms defines “stud” as follows:

One of the vertical members in the walls of a frame building to which wallboards, lathing, or paneling is nailed or fastened.

See Exhibit 1. (Evidence entered into record at page 9 of Applicant's response of July 14, 2006).

Certainly, this definition of "stud" is consistent with how Applicants have used the term in their specification. A person of ordinary skill in the art would likewise view the term "stud" as referring to a vertical member in a wall structure.

The same McGraw-Hill Dictionary of Scientific and Technical Terms defines "spacer" as:

A device for holding two members at a given distance from each other.

See Exhibit 2. (Evidence entered into record at page 9 of Applicant's response of July 14, 2006).

Thus, the term "stud spacer" means a structural member interposed between studs of a wall for holding the studs at a given distance from each other. This construction is consistent with Applicants' specification and how a person of ordinary skill in the art would construe the term.

Vukmanic does not disclose a stud or a stud spacer. Indeed, Vukmanic does not even show or discuss a wall structure. Instead, Vukmanic discloses a ceiling suspension system that includes main runners 11 and cross runners 12 for supporting ceiling tiles. The Examiner finds that the runners 11 are studs, and that cross runners 12 in the ceiling system constitutes stud spacers. This finding is error. It is contrary to the proper construction of "stud" and "stud spacer." A ceiling structure is not a wall, and

structural components of a ceiling structure can never be deemed a stud or a stud spacer.

All of Applicants' claims are restricted to a stud spacer for extending between studs. Claim 1, for example, recites the term "stud spacer" in both the preamble and body of the claim. Hence, Applicants' claims cannot be anticipated by a reference that does not disclose studs or stud spacers.

3. The Examiner's finding that Vukmanic discloses a stud spacer is unsupported.

The Examiner's Section 102 rejection rests entirely on the finding that Vukmanic discloses a stud spacer. The Examiner found: "Vukmanic shows a stud spacer (12) for extending between two studs with each stud having an opening therein..." Final Office Action, page 3. That finding is unsupported. That is, there is no substantial evidence that will support that finding. The structure 12 shown in Vukmanic is not a stud spacer. On the contrary, it is a cross runner found in a ceiling structure for supporting ceiling tiles. That finding or that fact is incontrovertible.

These findings bring into focus the shortcomings of the Examiner's Section 102 analysis. That is, if the Examiner had properly construed the term "stud spacer", then it would have been clear that the cross runner 12 in Vukmanic does not meet the stud spacer limitation in the claims.

4. The claim term “stud spacer” is a structure and not an intended use phrase.

The Examiner appears to maintain that a stud spacer is not a structural member, but simply an expression of an intended use. Respectfully, Applicant disagrees. The term “stud spacer” is a term of art widely used to describe a structural component of a wall. Persons of ordinary skill extensively refer to stud spacers as structural members in a wall, and the customary and ordinary meaning of “stud spacer”, as discussed above, is consistent with its use as a term of art.

Many U.S. patents illustrate that the term “stud spacer” is a structure and is commonly referred to as a structure - not an intended use. The use of “stud spacer” as an ordinary term for defining a structure in a wall is evidenced in various U.S. patents. For example, see U.S. Patent No. 6,843,035 which refers to a prior art patent which reveals the use of a “stud spacer” used in construction. U.S. Patent No. 5,274,973 is directed to a Stud Spacer and a Mounting System. U.S. Patent No. 4,625,415, again, relates to a stud spacer. U.S. Patent No. 4,595,165 refers to a 2 x 4 stud spacer. U.S. Patent No. 4,155,208 is directed to a building insulation and refers to stapling a structure to a stud spacer.

B. Claims 1, 6-8, and 11 Are Not Obvious Over Soucy and Pellock.

Claim 1 is as follows:

A stud spacer for extending between two studs with each stud having an opening therein, the stud spacer comprising:
a main member adapted to extend between the two studs;
the main member including first and second end portions;
a projection extending from one of the end portions;
an opening formed in the other end portion;
wherein the main member includes a pair of side flanges and a pair of end flanges;
wherein the end flanges are adapted to be connected to the two studs that the stud spacer extends between; and
wherein the stud spacer is adapted to be connected to another stud spacer by extending the projection of the one stud spacer through the opening within one stud and into the opening of another stud spacer.

1. Uncontrovertible facts relative to Soucy's teachings.

A review of Soucy reveals the following evidence that is uncontrovertible:

- a. An object of Soucy's invention is to provide a bracing member 32 that when engaged between studs is readily removable. Soucy column 1, lines 20-24.
- b. Another object of Soucy's invention is to provide a bracing member 32 that is constructed from heavy gauge sheet material. Soucy column 1, lines 24-27.
- c. Another object of Soucy's invention is to provide a bracing member which will conform to conventional forms of manufacture, be of simple construction and easy to use so as to provide a device that will be economically feasible, long lasting and relatively trouble free in operation. Soucy column 1, lines 33-37.
- d. Soucy's bracing member is designed to be used in a non-load bearing petition wall. Soucy column 1, line 9, 18, 63-64; column 2, line 14; and column 4, line 9.

In setting forth the Section 103 rejection with respect to the end flanges, the Examiner states:

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Soucy's structure to show the main member including..... a pair of end flanges, the end flanges are adapted to be connected to the two studs that the stud spacer extends between since the flanges enhance the securement of the spacer to its supporting structures.....

Final Office Action, pp. 4 and 5.

There is no substantial evidence supporting this finding. Respectfully, this is a classical hindsight reconstruction of Applicant's invention because it directly goes counter to the teachings of Soucy. As noted above, Soucy specifically teaches that an object of his invention is to provide a bracing assembly that is "readily removable" from between adjacent studs. Soucy column 1, lines 20-24. It is clear from viewing figures 2 and 4 of Soucy that the bracing member 32 is indeed readily removable from the studs. All that is required is that the technician engage bracing member 32 with his hand and simply lift upwardly. That removes the bracing member from between the studs.

Even aside from Soucy's declaration that an object of his invention is to provide a bracing member that is readily removable, there is indeed no need to secure the bracing members of Soucy to the respective studs. As designed, Soucy's bracing members 32 will indeed fully and completely brace the studs. Soucy makes a point that the bracing members are designed to be used in a partition wall, which expressed in Soucy, is a non-load bearing wall. See Soucy column 1, lines 8-9. Further, those skilled in the art appreciate that a partition wall is a non-load bearing wall. Adding end flanges to Soucy

that would be secured to the studs only complicates the Soucy bracing member, adds costs, and makes it more difficult and time consuming to install.

The Examiner's position here is unsupported and certainly there is not substantial evidence to support a *prima facie* case of obviousness here.

3. There is no evidence that supports the Examiner's position that it would be obvious to incorporate side flanges into Soucy's heavy gauge sheet material bracing members.

There is no dispute that Soucy does not include side flanges. Indeed, no side flanges are needed. Again Soucy, pointing out the main objects of his inventions, states that one object of the invention is to construct the bracing assembly from heavy gauge sheet material. Soucy column 1, lines 24-27. Further, Soucy states that another object is to provide a bracing assembly that is "long lasting". Soucy column 1, lines 32-37. By stating that his objects are to construct the bracing member 32 out of heavy gauge sheet material, which really means heavy gauge sheet metal, and that the bracing member is to be long lasting, means that Soucy has designed his bracing member such that it is designed not to fail. Side flanges added to Soucy serve no real purpose.

The Examiner, in combining the side flanges of Pellock with Soucy, states as follows:

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Soucy's structure to show the main member, including a pair of side flanges...[to] reinforce the main member against bending as taught by Pellock.

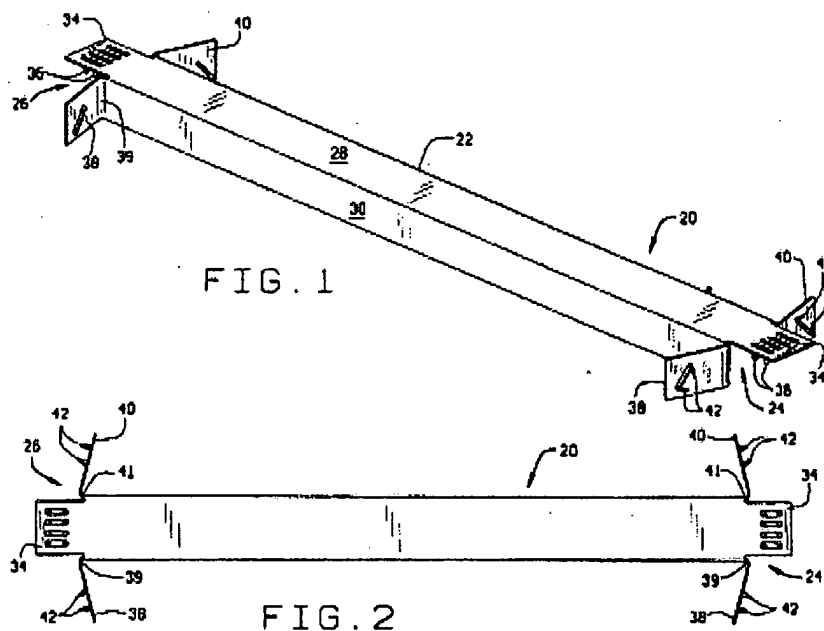
Final Office Action, pp. 4 and 6.

Respectfully, there is no evidence to support this finding and indeed Soucy teaches against such an arrangement by specifically stressing that one of the objects of his invention is to provide a bracing member constructed of heavy gauge sheet metal or material. There is absolutely no need for incorporating side flanges into Soucy's bracing member. This is not a case where Soucy's bracing members are designed from light gauge sheet metal. As stressed above, just the opposite is true. Soucy's bracing members are made of heavy gauge sheet material that is designed to "be economically feasible" to be "long lasting and relatively trouble free in operation". Soucy, column 1, lines 33-37. Adding side flanges will add extra material and cost and will be counter to Soucy's object of providing an "economically feasible" bracing member. Moreover, adding side flanges will not result in the bracing members lasting longer or being more trouble free in operation. Further, side flanges would inhibit trouble-free operation by discouraging or thwarting a worker from upwardly bumping the bottom of the Soucy brace to disengage it for removal.

Respectfully, the Examiner's obviousness rejection here is a classical hindsight rejection and ignores the most basic and fundamental teachings of Soucy.

4. The Examiner's Section 103 rejection fails to adequately describe how the end flanges of Pellock could be incorporated into Soucy.

The Examiner never discloses to Applicants how he envisions the end flanges 38 and 40 of Pellock, shown below, are to be incorporated to the Soucy bracing member.



After all, the so-called end flanges 38 and 40 of Pellock are simple extensions of side flanges that have been turned outwardly. Soucy does not have side flanges. It is difficult to envision how end flanges can be incorporated into Soucy and work. This is especially of concern since Soucy points out that one of his objects is to provide a bracing assembly "which will conform to conventional forms of manufacture..." See, Soucy column 1, lines 34-35.

The Examiner's obviousness rejection is problematic for the Applicants because it is simply based on a conclusion that Pellock's end flanges can be incorporated into Soucy. Respectfully, the Examiner should be required to explain where the end flanges would be placed in Soucy and how they would be secured or formed with the structure of Soucy. The Examiner might take the position there are any number of ways. Still, the Examiner should be required to set forth what he believes is the obvious way so that Applicant will have an opportunity to traverse and argue against such. It is this kind of information that is crucial in an obviousness rejection because it is one thing to simply conclude that it would be obvious to use end flanges in Soucy, and it is another thing altogether to make that conclusion and explain how such can be accomplished.

Applicants appreciate that in some obviousness rejections that it is clear as to how the secondary reference feature is incorporated into the primary reference. In those cases the Examiner need not explain. But there are other cases, like the present case, where it is not clear or obvious how a person of ordinary skill in the art would incorporate the secondary feature into the primary device. It is in those cases that the Examiner should go beyond just merely stating that a secondary feature can be incorporated into the primary device.

C. Claim 7 is Not Obvious over Soucy Combined with Pellock and Further Combined with Tollenaar.

Claim 7 depends from claim 6. Claim 6 and 7 are as follows:

6. The stud spacer of claim 1 wherein the main member includes a central section and wherein the side flanges are turned out of the plane of the central section.

7. The stud spacer of claim 6 wherein the end flanges and the side flanges are turned in opposite directions with respect to the central section.

As noted above, it is not altogether clear how the Examiner proposes to modify Soucy to include the end flanges in the rejection of claim 1. For purposes of argument, Applicants will assume the Examiner's case is that he would provide Soucy with side flanges 30 from Pellock and then turn the ends of the side flanges outwardly to form end flanges, again as shown in Pellock above.

Now the Examiner maintains that it would have been obvious to further modify Soucy once again to make the end flanges extend in a direction opposite to the direction of the side flanges. Respectfully, this is one more step in reconstructing Applicant's invention through hindsight. The Examiner states:

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Soucy's modified structure to show the end flanges and the side flanges are turned in opposite directions with respect to the central section as taught by Tollenaar, since it enables the easy secure attachment of the stud spacer to the studs with the end flanges as access to the end flanges are not blocked by the side flanges.

Final Office Action page 6.

There is no *prima facie* case of obviousness here. As seen in figures 1 and 2 of Pellock, the so-called end flanges are not blocked. The end flanges extend outwardly from the side flanges and are easily securable to the stud. Thus, the finding that this improves access to the end flanges because they are not blocked by the side flanges is erroneous.

The only reason to extend the end flanges as claimed and in the opposite direction of the side flanges is to yield Applicants' claimed invention. Respectfully, there

is no reason to further modify Soucy and Pellock with Tollenaar. This is a clear example where there is absolutely no reason for the last modification and where the proposed modification is based entirely on hindsight.

Thus, it is respectfully urged that claim 7 contains allowable subject matter and the Examiner's rejection should be reversed.

CONCLUSION

For the foregoing reasons, the Board is respectfully urged to hold that the Examiner cannot refuse to disclose a claim construction of a clearly disputed claim term when requested by the Applicant. Further, the Board is respectfully urged to reverse the rejections of the Examiner in this case.

(VIII.) CLAIMS APPENDIX

1. A stud spacer for extending between two studs with each stud having an opening therein, the stud spacer comprising:
 - a main member adapted to extend between the two studs;
 - the main member including first and second end portions;
 - a projection extending from one of the end portions;
 - an opening formed in the other end portion;
 - wherein the main member includes a pair of side flanges and a pair of end flanges;
 - wherein the end flanges are adapted to be connected to the two studs that the stud spacer extends between; and
 - wherein the stud spacer is adapted to be connected to another stud spacer by extending the projection of the one stud spacer through the opening within one stud and into the opening of another stud spacer.
6. The stud spacer of claim 1 wherein the main member includes a central section and wherein the side flanges are turned out of the plane of the central section.
7. The stud spacer of claim 6 wherein the end flanges and the side flanges are turned in opposite directions with respect to the central section.
8. The stud spacer of claim 1 wherein at least one end flange is divided into at least two portions and wherein the projection extends between the two portions.
11. The stud spacer of claim 1 wherein the opening formed in the second end portion of the main member includes a slot.

21. A stud spacer for extending between two studs comprising:
 - a main member adapted to extend between the two studs;
 - the main member including first and second end portions;
 - a projection extending from one end portion;
 - a projection receiver formed on the other end portion; and
 - wherein either the projection or projection receiver includes one or more locking members such that when a projection of one stud spacer is projected into the projection receiver of another stud spacer a locked condition is realized.
22. The stud spacer of claim 21 wherein either the projection or projection receiver includes one or more stops for engaging the one or more locking members.
23. The stud spacer of claim 22 wherein the locking members are disposed on the projection and the stops form a part of the projection receiver.
24. The stud spacer of claim 21 wherein at least a portion of the projection is deflectable in response to the projection engaging the projection receiver.
34. A stud spacer for extending between two studs and connected to one or more similar stud spacers, comprising:
 - a. a main member;
 - b. the main member having opposed end portions;
 - c. a projection extending from one end portion;
 - d. a receiver disposed on the other end portion and adapted to receive a projection of another stud spacer; and

- e. wherein when two stud spacers are connected together the projection of one stud spacer will engage and lock with the receiver of another stud spacer.

35. The stud spacer of claim 34 wherein the projection and receiver are disposed such that when consecutive stud spacers are connected together, the projections and receivers will overlie each other.

36. The stud spacer of claim 34 wherein both the projection and receiver include a flap that is at least partially flexible.

37. The stud spacer of claim 36 wherein in a locked position, the flaps of the projection and receiver engage each other.

38. The stud spacer of claim 34 wherein both the projection and receiver include a flexible flap, a hold down element, an opening disposed between the flap and the hold down element, a deflector, and an opening disposed between the deflector and the hold down element.

(IX.) EVIDENCE APPENDIX

Exhibit 1: Definition of “stud” from McGraw-Hill Dictionary of Scientific and Technical

Terms. (Evidence entered into record at page 9 of Applicant’s response of July 14, 2006).

Exhibit 2: Definition of “spacer” from McGraw-Hill Dictionary of Scientific and Technical

Terms. (Evidence entered into record at page 9 of Applicant’s response of July 14, 2006).

(X.) RELATED PROCEEDINGS APPENDIX

None.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

A handwritten signature in black ink, appearing to read "Larry L. Coats", is written over a horizontal line.

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On the cover: Photomicrograph of crystals of vitamin B₁.
(Dennis Kunkel, University of Hawaii)

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stub matching

stub matching [ELECTROMAG] Use of a stub to match a transmission line to an antenna or load; matching depends on the spacing between the two wires of the stub, the position of the shorting bar, and the point at which the transmission line is connected to the stub. ('stəb, mætʃɪŋ)

stub mortise [ENG] A mortise which passes through only part of a timber. ('stəb, mɔːr-tɪs)

Stubs gage [DES ENG] A number system for denoting the thickness of steel wire and drills. ('stəbz, ɡeɪ)

stub-supported coaxial [ELECTROMAG] Coaxial whose inner conductor is supported by means of short-circuited coaxial stubs. ('stəb sə'pɔːtəd kə'ak-si-əl)

stub-supported line [ELECTROMAG] A transmission line that is supported by short-circuited quarter-wave sections of coaxial line; a stub exactly a quarter-wavelength long acts as an insulator because it has infinite reactance. ('stəb sə'pɔːtəd 'lɪn)

stub switch [ENG] A pair of short switch rails, held only at one end and free to move at the other end; used in mining and to some extent on narrow-gauge industrial tramways. ('stəb swɪtʃ)

stub tenon [ENG] A tenon that fits into a stub mortise. ('stəb 'ten-ən)

stub tube [MECH ENG] A short tube welded to a boiler or pressure vessel to provide for the attachment of additional parts. ('stəb, tʌb)

stub tuner [ELECTROMAG] Stub which is terminated by movable short-circuiting means and used for matching impedance in the line to which it is joined as a branch. ('stəb, tʉn-ər)

stucco [MATER] A smooth plasterlike material applied to the outside wall or other exterior surface of a building or structure. ('stʉk-ə)

stud [BUILD] One of the vertical members in the walls of a framed building to which wallboards, lathing, or paneling is nailed or fastened. [DES ENG] 1. A rivet, boss, or nail with a large, ornamental head. 2. A short rod or bolt threaded at both ends without a head. ('stʉd)

stud driver [MECH ENG] A device, such as an impact wrench, for driving a hardened steel nail (stud) into concrete or other hard materials. ('stʉd, dɪv-ər)

Student's distribution [STAT] The probability distribution used to test the hypothesis that a random sample of n observations comes from a normal population with a given mean. ('stʉd-ənts, dɪstrɪ'bʉtɪ-shən)

Student's t-statistic [STAT] A one-sample test statistic computed by $T = \sqrt{n}(\bar{X} - \mu_H)/S$, where \bar{X} is the mean of a collection of n observations, S is the square root of the mean square deviation, and μ_H is the hypothesized mean. ('stʉd-ənts 'tɛ-stə-tɪstɪk)

Student's t-test [STAT] A test in a one-sample problem which uses Student's t-statistic. ('stʉd-ənts 'tɛ-test)

studio [COMMUN] A room in which television or radio programs are produced. ('stʉd-ɪ-ə)

stud link chain [NAV ARCH] Chain in which each link has a stud at its midlength perpendicular to the major axis to maintain the shape of the link. ('stʉb 'lɪŋk, ʃeɪn)

stud wall [BUILD] A wall formed with timbers; studs are usually spaced 12-16 inches (30-41 centimeters) on center. ('stʉb, wɔːl)

stud welding [MBT] Arc-welding using the heat of an electric arc produced between a metal stud and another part, and then bringing the parts together under pressure. ('stʉd, weld-ɪŋ)

stuffed mineral [MINERAL] A mineral having extra ions of a foreign element within its larger interstices. ('stʉft 'mɪn-ər-əl)

stuffing [ENG] A method of sealing the mechanical joint between two metal surfaces; packing (stuffing) material is inserted within the seal area container (the stuffing or packing box), and compressed to a liquid-proof seal by a threaded packing ring follower. Also known as packing. ('stʉf-ɪŋ)

stuffing box [ENG] A packed, pressure-tight joint for a rod that moves through a hole, to reduce or eliminate fluid leakage. ('stʉf-ɪŋ, bɔːks)

stuffing nut [ENG] A nut for adjusting a stuffing box. ('stʉf-ɪŋ, nʉt)

stull [MIN ENG] A platform laid on timbers, braced across a working from side to side, to support workers or to carry ore or waste. ('stʉl)

stull piece [MIN ENG] 1. A piece of timber placed slanting over the back of a level to prevent rock falling into the level

from the stopes above. 2. Timbers bracing the platform of a stull. ('stʉl, pi:s)

stull stoping [MIN ENG] Stull timbers placed between the foot and hanging walls, which constitute the only artificial support provided during the excavation of a stope. ('stʉl, stɔːp-ɪŋ)

stump [MIN ENG] A small pillar of coal left between the gangway or airway and the breasts to protect these passages; any small pillar. ('stʉmp)

stunt [PL PATH] Any of several plant diseases marked by reduction in size of the plant. ('stʉnt)

stunt box [ELEC] A device to control the nonprinting functions of a teletypewriter terminal. ('stʉnt, bɔːks)

stupp [MIN ENG] A black residue from distilled mercury ore, consisting of soot, hydrocarbons, mercury and mercury compounds, and ore dust. ('stʉp)

sturgeon [VERT ZOO] Any of 10 species of large bottom-living fish which comprise the family Acipenseridae; the body has five rows of bony plates, and the snout is elongate with four barbels on its lower surface. ('stʉr-jən)

Sturges rule [STAT] A rule for determining the desirable number of groups into which a distribution of observations should be classified; the number of groups or classes is $1 + 3.3 \log n$, where n is the number of observations. ('stʉr-jəs, rʉl)

Sturm-Liouville problem [MATH] The general problem of solving a given linear differential equation of order $2n$ together with $2n$ -boundary conditions. Also known as eigenvalue problem. ('stʉrm lyʉ'vɪl, prɔːbl-əm)

Sturm-Liouville system [MATH] A given differential equation together with its boundary conditions having Sturm-Liouville problem form. ('stʉrm lyʉ'vɪl, sis-təm)

Sturm sequence [MATH] For a polynomial $p(x)$, this is the sequence of functions $f_0(x), f_1(x), \dots$, where $f_0(x) = p(x), f_1(x) = p'(x)$, and $f_n(x)$ is the negative remainder that occurs by finding the greatest common divisor of $f_{n-2}(x)$ and $f_{n-1}(x)$ via the euclidean algorithm. ('stʉrm, sɛkw-əns)

Sturm's theorem [MATH] This gives a method to determine the number of real roots of a polynomial $p(x)$ which lie between two given values of x ; the Sturm sequence of $p(x)$ provides the necessary information. ('stʉrmz, θɪ-rəm)

sturtite [MINERAL] A black mineral composed of hydrous silicate of iron, manganese, calcium, and magnesium; occurs in compact masses. ('stʉrd-ɪt)

stutter [COMMUN] Series of undesired black and white lines sometimes produced when a facsimile signal undergoes a sharp amplitude change. [MED] A speech disorder marked by repetition of words, syllables, or sounds, or by hesitations in manner by the speaker. ('stʉd-ər)

Stuve chart [METEOROL] A thermodynamic diagram with atmospheric temperature as the x axis and atmospheric pressure to the power 0.286 as the y ordinate, increasing downward; named after G. Stuve. Also known as adiabatic chart; pseudoadiabatic chart. ('stɪv-ə, ʃɑːrt)

St twist [TEXT] A left-handed yarn twist in which the spirals resemble the letter S. ('es, 'twɪst)

sty See hordeolum. ('stɪ)

Styginae [INV ZOO] A subfamily of butterflies in the family Lycaenidae in which the prothoracic legs in the male are non-functional. ('stɪ-jə-nɛ)

Stygocaridacea [INV ZOO] An order of crustaceans in the superorder Syncarida characterized by having a furca. ('stɪg-ə, kərə'das-ɛ-ə)

Stylasterina [INV ZOO] An order of the class Hydrozoa, including several brightly colored branching or encrusting coral-like cnidarians of warm seas. ('stə, last-ər-ɪ-nə)

style [BOT] The portion of a pistil connecting the stigma and ovary. [ENG] See gnomon. [ZOO] A slender elongated process on an animal. ('stɪl)

stylet [GRAPHICS] A slender, pointed marking tool, as one used in graving. [INV ZOO] A slender, rigid, elongated appendage. [MED] 1. A slender probe used for surgery. 2. A thin wire inserted in a catheter to provide support or in a hollow needle to clear the passage. ('stɪl-ət)

styloglossus [ANAT] A muscle arising from the styloid process of the temporal bone, and inserted into the tongue. ('stɪ-lɔː'glɔːs-əs)

stylohyoid [ANAT] Pertaining to the styloid process of the temporal bone and the hyoid bone. ('stɪ-lɔː'hɪ-ɔɪd)

styloid [ZOO] Resembling a style. ('stɪ-lɔɪd)

STURGEON


 Short-nosed sturgeon (*Acipenser brevirostrus*).

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EXHIBIT

2

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space polar coordinates

the permeability of a vacuum is arbitrarily taken as unity; in the meter-kilogram-second-ampere system, it is $4\pi \times 10^{-7}$ { 'spās ,pərmē'a'bil'ədē }

space polar coordinates [MATH] A system of coordinates by which a point is located in space by its distance from a fixed point called the pole, the colatitude or angle between the polar axis (a reference line through the pole) and the radius vector (a straight line connecting the pole and the point), and the longitude or angle between a reference plane containing the polar axis and a plane through the radius vector and polar axis. { 'spās 'pō-lər kō'ōrd-ən-əts }

spaceport [AERO ENG] An installation used to test and launch spacecraft. { 'spās ,pōrt }

space power system [AERO ENG] An on-board assemblage of equipment to generate and distribute electrical energy on satellites and spacecraft. { 'spās 'pau-ər ,sist-əm }

space probe [AERO ENG] An instrumented vehicle, the payload of a rocket-launching system designed specifically for flight missions to other planets or the moon and into deep space, as distinguished from earth-orbiting satellites. { 'spās ,prōb }

space processing [ENG] The carrying out of various processes aboard orbiting spacecraft, utilizing the low-gravity, high-vacuum environment associated with these vehicles. { 'spās ,prōs-ēs-ŋg }

space quadrature [PHYS] A difference of a quarter-wave-length in the position of corresponding points of a wave in space. { 'spās ,kwād-rə-cher }

space quantization [QUANT MECH] The quantization of the component of the angular momentum of a system in some specified direction. { 'spās ,kwān-tā'zā-shən }

spacer [ENG] 1. A piece of metal wire twisted at one end to form a guard to keep the explosive in a shothole in place and twisted at the other end to form a guard to hold the tamping in its place. 2. A piece of wood doweling interposed between charges to extend the column of explosive. 3. A device for holding two members at a given distance from each other. Also known as spacer block. 4. The tapered section of a pug joining the barrel to the die; clay is compressed in this section before it issues through the die. { 'spās-ər }

spacer block See spacer. { 'spās-ər ,blāk }

spacer deoxyribonucleic acid [MOL BIO] Untranscribed deoxyribonucleic acid (DNA) segments, usually containing repetitive DNA, of eukaryotic and some viral genomes flanking functional genetic regions (cistrons). { 'spās-ər dē'āks-sē,rī-bō-nī ,klē-ik 'as-əd }

space reconnaissance [AERO ENG] Reconnaissance of the surface of a planet from a space ship or satellite. { 'spās rī ,kän-sā-shən }

space reddening [ASTRON] Reddening of light from distant stars caused by selective absorption of blue light by interstellar dust clouds. { 'spās ,red-ən-ŋg }

space reflection symmetry See parity. { 'spās rī ,flek-shən ,sīm-ē-trī }

space request [COMPUT SCI] A parameter that specifies the amount of storage space required by a new file at the time the file is created. { 'spās rī ,kwest }

space research [AERO ENG] Research involving studies of aspects of environmental conditions beyond the atmosphere of the earth. { 'spās rī ,sərch }

spacer strip [MET] A strip or bar of metal placed in the root of a weld joint, prepared for a groove weld, to serve as backing and maintain root opening during welding. { 'spās-ər ,stri:p }

space satellite [AERO ENG] A vehicle, crewed or uncrewed, orbiting the earth. { 'spās ,sād-əl ,it }

space ship See spacecraft. { 'spās ,ship }

space shuttle [AERO ENG] A reusable orbital spacecraft, designed to travel from the earth to an orbital trajectory and then return. { 'spās ,shud-əl }

space simulator [AERO ENG] 1. Any device which simulates one or more parameters of the space environment and which is used to test space systems or components. 2. Specifically, a closed chamber capable of reproducing approximately the vacuum and normal environments of space. { 'spās ,sīm-yə ,lād-ē-ŋg }

space station [AERO ENG] An autonomous, permanent facility in space for the conduct of scientific and technological research, earth-oriented applications, and astronomical observations. { 'spās ,stā-shən }

space suit [ENG] A pressure suit for wear in space or at very

low ambient pressures within the atmosphere, designed to permit the wearer to leave the protection of a pressurized cabin. { 'spās ,sūt }

space suppression [COMPUT SCI] Prevention of the normal movement of paper in a computer printer after the printing of a line of characters. { 'spās sə ,presh-ən }

space technology [AERO ENG]...The systematic application of engineering and scientific disciplines to the exploration and utilization of outer space. { 'spās tek ,nāl-ə-jē }

space-time [RELAT] A four-dimensional space used to represent the universe in the theory of relativity, with three dimensions corresponding to ordinary space and the fourth to time. Also known as space-time continuum. { 'spās 'tīm }

space-time continuum See space-time. { 'spās 'tīm kən'tin-yū-wəm }

space-to-mark transition [COMMUN] The transition from the space condition to the mark condition in telegraphic communication. { 'spās tə ,mārk tran'zish-ən }

Space Tracking and Data Acquisition Network [ENG] A network of ground stations operated by the National Aeronautics and Space Administration, which tracks, commands, and receives telemetry for United States and foreign unmanned satellites. Abbreviated STADAN. { 'spās 'trak-ŋg ɔn 'dād-ə ,ak-wə'zish-ən ,net ,wɜ:k }

space vehicle See spacecraft. { 'spās ,vē-ə-kəl }

space velocity [ASTRON] A star's true velocity with reference to the sun. [CHEM ENG] The relationship between feed rate and reactor volume in a flow process; defined as the volume or weight of feed (measured at standard conditions) per unit time per unit volume of reactor (or per unit weight of catalyst). { 'spās və ,lās-əd-ē }

space walk [AERO ENG] The movement of an astronaut outside the protected environment of a spacecraft during a space flight; the astronaut wears a spacesuit. { 'spās ,wɜ:k }

space wave [ELECTROMAG] The component of a ground wave that travels more or less directly through space from the transmitting antenna to the receiving antenna; one part of the space wave goes directly from one antenna to the other; another part is reflected off the earth between the antennas. { 'spās ,wāv }

space weapon [ORD] A weapon that travels through space and is directed against an enemy target whether on the ground, in the air, or in space. { 'spās ,wep-ən }

spacing [GRAPHICS] The arrangement of characters, words, lines, and other elements to give the most pleasing effect on a printed page. { 'spās-ŋg }

spacing bias See bias telegraph distortion. { 'spās-ŋg ,bī-əs }

spacing clamp [PETRO ENG] A clamp for maintaining the rod string in the correct pumping position while the well is in the final stages of being fitted to the pump. { 'spās-ŋg ,klamp }

spacing pulse [COMMUN] In teletypewriter operation, the signal interval during which the selector unit is not operated. { 'spās-ŋg ,pʌls }

spacing wave See back wave. { 'spās-ŋg ,wāv }

spacistor [ELECTR] A multiple-terminal solid-state device, similar to a transistor, that generates frequencies up to about 10,000 megahertz by injecting electrons or holes into a space-charge layer which rapidly forces these carriers to a collecting electrode. { spā'sis-tər }

spackling [ENG] The process of repairing a part of a plaster wall or mural by cleaning out the defective spot and then patching it with a plastering material. { 'spak-ŋŋ }

SPADATS See space detection and tracking system. { 'spā ,dats }

spade [DES ENG] A shovel-like implement with a flat oblong blade; used for turning soil by pushing against the blade with the foot. { 'spād }

spade bolt [DES ENG] A bolt having a spade-shaped flattened head with a transverse hole, used to fasten shielded coils, capacitors, and other components to a chassis. { 'spād ,bɔlt }

spade drill [DES ENG] A drill consisting of three main parts: a cutting blade, a blade holder or shank, and a device, such as a screw, which fastens the blade to the holder; used for cutting holes over 1 inch (2.54 centimeters) in diameter. { 'spād ,dril }

spade grip [ORD] D-shaped handle for pointing a gun, fastened on the rear of the receiver of certain flexible automatic weapons. { 'spād ,grip }

spade lug [DES ENG] An open-ended flat termination for a wire lead, easily slipped under a terminal nut. { 'spād ,ləg }

spadix [BOT] A fleshy spike that is enclosed in a leaflike